



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,925	09/16/2003	Michael E. Benz	P-10908.00	2297
26813	7590	12/08/2005	EXAMINER	
MUETING, RAASCH & GEBHARDT, P.A. P.O. BOX 581415 MINNEAPOLIS, MN 55458			PENG, KUO LIANG	
		ART UNIT	PAPER NUMBER	
		1712		

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/663,925	BENZ ET AL.
	Examiner Kuo-Liang Peng	Art Unit 1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 11/17/05 Response.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-17, 35-36 is/are pending in the application.
  - 4a) Of the above claim(s) 18-34, 37-40 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-17, 35-36 is/are rejected.
- 7) Claim(s) 12 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date See next page.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**Continuation Sheet (PTOL-326)**

IDS: 11/22/05, 2/7/05, 3/1/04, 1/30/04, 1/12/04

## **DETAILED ACTION**

1. Applicant's election of the invention of Group I in the response to restriction requirement filed on November 17, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The requirement is still deemed proper and is therefore made FINAL.

Groups II-III, Claims 18-34 and 37-40 are withdrawn for further consideration.

### ***Claim Objections***

3. Claim 12 is objected to because of the following informalities:

In Claim 12 (line 2), should "it has" be -- containing --?

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-17 and 35-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Gunatillake327 (WO 99/50327).

The following column and line numbers are based on Gunatillake327's US equivalent, US 6 437 073.

For Claims 1-12, 14-15, 17 and 35-36, Gunatillake327 discloses a polyurethane derived from a chain extender represented by formula (1) where R<sub>7</sub> can be a C1-12 alkylene or an arylene, etc. Note that the chain extenders containing arylene groups inherently impart hard segments to the polyurethane. (col. 2, line 36 to col. 3, line 38, col. 3, line 65 to col. 4, line 3, col. 4, lines 60-64, col. 6, lines 12-62 and Examples) For Claim 13, Gunatillke327's polyurethane is a biomaterial. (col. 7, lines 36-56) For Claim 16, a non-Silicon-containing chain extender can be used. (col. 5, lines 9-47)

6. Claims 1-17 and 35-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Gunatillake863 (WO 99/03863).

The following column and line numbers are based on Gunatillake863's US equivalent, US 6 420 452.

Art Unit: 1712

For Claims 1-12, 14-15, 17 and 35-36, Gunatillake863 discloses a polyurethane derived from a chain extender represented by formula (1) where R<sub>7</sub> can be a C1-12 alkylene or an arylene, etc. Note that the chain extenders containing arylene groups inherently impart hard segments to the polyurethane. (col. 2, line 47 to col. 3, line 38, col. 3, lines 62-67, col. 4, lines 55-58, col. 5, lines 14-45, col. 5, line 65 to col. 6, line 59 and Examples) For Claim 13, Gunatillke327's polyurethane is a biomaterial. (col. 7, line 61 to col. 8, line 26) For Claim 16, a non-Silicon-containing chain extender can be used. (col. 5, lines 14-45)

7. Claims 1-10, 13, 15-17 and 35-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Zdrabala (US 4 647 643).

For Claims 1-10, 15, 17 and 35-36, Zdrabala discloses a polyurethane derived from a silicone diol of formula (III) where W can be a C1-C4 alkylene or an arylene. Note that the chain extenders containing arylene groups inherently impart hard segments to the polyurethane. (col. 2, line 16 to col. 3, line 25, col. 3, line 68 to col. 4, line 3, col. 4, lines 42-49 and Examples)

For Claim 13, the polyurethane is a biomaterial because it is used in contact with body fluids. (col. 4, lines 42-49)

For Claim 16, the polyurethane can derived from the silicone diol and a short chain diol such as ethylene glycol, etc. (col. 4, line 50 to col. 5, line 4 and col. 5, lines 41-48)

8. Claims 35-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Gunatillake971 (WO 00/64971).

The following paragraph numbers are based on Gunatillake863's US equivalent, US 2002/0028901.

Gunatillake863 discloses a polyurea or a polyurethane-urea derived from a silicone diamine of formula (I). ([0008]-[0020], [0024], [0028], [0074]-[0078] and Examples)

9. Claim 35 is rejected under 35 U.S.C. 102(b) as being anticipated by Iwahara (EP 661 332).

Iwahara discloses a polymer containing at least one structure unit selected from the group consisting of formula (1), formula (2) and formula (3). (page 3, lines 6-30 and Examples)

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zdrahala.

Zdrahala discloses a polyurethane derived from a silicone diol, *supra*, which is incorporated herein by reference. Zdrahala teaches that W in formula (III) can be a divalent radical such as alkylene of four carbon atoms. Zdrahala is silent on the a W having more than four carbon atoms. However, court held that a *prima facie* case of obviousness may be made when chemical compounds have very close structural similarities and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." *In re Payne*, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp

December 5, 2005

  
Kuo Liang Peng  
Primary Examiner  
Art Unit 1712